

C L A I M S

1. A fuel cell stack comprising:

a plurality of multi-cell modules stacked in series, each of the plurality of multi-cell modules comprising a plurality of fuel cells layered in a fuel cell stacking direction and including opposite end fuel cells at opposite ends of the plurality of fuel cells layered; and

 a restraining member for restraining each of the plurality of multi-cell modules at the opposite end fuel cells of each of the plurality of multi-cell modules.

2. A fuel cell stack according to claim 1, wherein the restraining member restrains each of the plurality of multi-cell modules in a direction perpendicular to the fuel cell stacking direction.

3. A fuel cell stack according to any one of claims 1 and 2, further comprising:

 a connecting member for connecting adjacent multi-cell modules of the plurality of multi-cell modules to each other at opposing end fuel cells of the adjacent multi-cell modules.

4. A fuel cell stack according to any one of claims 1 and 2, wherein each of the opposite end fuel cells of each of the plurality of multi-cell modules is a dummy fuel cell generating no electric power.

5. A fuel cell stack according to any one of claims 1 and 2, wherein each of the opposite end fuel cells of each of the plurality of multi-cell modules has an extended portion formed by extending each of the opposite end fuel cells of each of the plurality of multi-cell modules outwardly in a direction perpendicular to the fuel cell stacking direction of each of the plurality of multi-cell modules, and each of the plurality of multi-cell modules is restrained by the restraining member in the direction perpendicular to a fuel cell stacking direction of each of the plurality of multi-cell modules at the extended portion.

6. A fuel cell stack according to claim 5, wherein the extended portion includes a hole formed therein and the restraining member is a restraining shaft extending through the hole formed in the extended portion.

7. A fuel cell stack according to claim 6, wherein the restraining shaft is a fuel cell stack tightening shaft.

8. A fuel cell stack according to claim 3, wherein the connecting member is a member different from the restraining member.

9. A fuel cell stack according to claim 8, wherein the connecting member is a

clip.

10. A fuel cell stack according to claim 8, wherein the connecting member is a member selected from the group composed of a bolt and a rivet.

11. A fuel cell stack according to claim 8, wherein each of the opposite end fuel cells of each of the plurality of multi-cell modules has an extended portion extended in a direction perpendicular to the fuel cell stacking direction of each of the plurality of multi-cell modules, and the connecting member is an ear portion formed in an extended portion of an end fuel cell of a first multi-cell module, the ear portion being bent so as to hold an extended portion of an end fuel cell of a second, adjacent multi-cell module.

12. A fuel cell stack according to claim 6, wherein the extended portion and the restraining shaft are electrically insulated from each other by an electric insulator.

13. A fuel cell stack according to claim 12, wherein the electric insulator is a bushing fixed to the hole formed in the extended portion of each of the opposite end fuel cells.

14. A fuel cell stack according to claim 13, wherein the bushing has a flange for preventing the bushing from being disengaged from the extended portion.

15. A fuel cell stack according to claim 12, wherein the electric insulator is a cylindrical member supported by the restraining shaft.

16. A fuel cell stack according to any one of claims 1 and 2, wherein each of the opposite end fuel cells of each of the plurality of multi-cell modules has an extended portion formed by extending each of the opposite end fuel cells of each of the plurality of multi-cell modules outwardly in a direction perpendicular to the fuel cell stacking direction of each of the plurality of multi-cell modules, and further comprising:

a deformation preventing member, disposed between extended portions of the opposite end fuel cells of each of the plurality of multi-cell modules, for preventing the extended portions of the opposite end fuel cells of each of the plurality of multi-cell modules from being deformed inboardly in the fuel cell stacking direction.

17. A fuel cell stack according to any one of claims 1 and 2, wherein the deformation preventing member includes an elastic or resilient member.